advanced through the vocal cords. Recently, there have been two manikin studies that have described its performance. The device was evaluated in normal and simulated difficult airways. Until now, there have been no descriptions of its use in live subjects. We describe two patients in whom the Airtraq, compared with the Macintosh blade, provided superior views of the larynx facilitating endotracheal intubation.

The first case was an anxious 59-yr-old male who was to undergo a total laryngectomy for cancer of the larynx. Anaesthetics had been complicated previously by Grade 4 views at direct laryngoscopy necessitating awake intubations. Initially, topical anaesthesia was applied to the upper airway and glycopyrolate administered intravenously. A target controlled infusion of propofol and remifentanil was commenced at a sedation dose. A Grade 4 view was confirmed at direct laryngoscopy using a Macintosh laryngoscope. The Airtraq was subsequently used providing Grade 1 views of the glottis and easy passage of an endotracheal tube.

The second case was a 42-yr-old female who presented for a routine septoplasty. Past medical history included pain in the temporomandibular joint during mastication and reduced mouth opening was noted on examination. Following induction of anaesthesia with propofol, fentanyl and atracurium, a Grade 3 view of the glottis was achieved at direct laryngoscopy using the Macintosh laryngoscope. When the Airtraq was employed, a Grade 1 view of the glottis was observed and endotracheal intubation allowed to proceed uneventfully.

The Airtraq is cheap and extremely easy to use, and we believe it should be included in the anaesthetist’s armamentarium for the difficult airway. Unlike the intubating laryngeal mask, endotracheal intubation using the Airtraq is achieved under direct visualization; however, more patient studies are required.

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References

Subdural or subarachnoid catheter?
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EDITOR:
I read with interest a case of total spinal anaesthesia reported by Batra and colleagues [1]. I would like to comment on their reasoning for the unusual spread of local anaesthetic leading to total spinal anaesthesia. After a careful review of the events, one cannot resist thinking that it hardly resembles a subdural block. ‘Soon after the administration of the test dose’, their patient complained of dizziness and weakness. This clinical picture is typically due to a subarachnoid injection of local anaesthetic. The block spread with subdural is more like an epidural with much slower onset than subarachnoid block with minimal hypotension. Their patient was uncon-
conscious, apnoeic, severely bradycardic and hypoten-
sive ‘within a couple of minutes’, which again
confirms that the local anaesthetic was injected into
the subarachnoid space.

The epidural catheter, they suggest, might have
entered the subdural space through the hole in the
dura made during multiple attempts at epidural. It
is possible that the catheter might well have entered
the subarachnoid space through an unrecognized
dural hole made by the Tuohy needle. Although
aspiration of cerebrospinal fluid (CSF) through the
catheter facilitates identification of subarachnoid
placement of the catheter, a negative aspiration does
not confirm that the catheter is not in subarachnoid
space. It is probably for this very reason that the test
doses are so widely practised.

They also suggest that the attempts at spinal
anaesthesia could have produced multiple punctures
in the dura through which local anaesthetic agents
could have seeped into the subdural or subarachnoid
spaces. To have a total spinal anaesthesia in such a
short time from injecting such a small volume of
local anaesthetic (lignocaine 2% 3 mL) into the
subdural space in the lumbar region in the sitting
position is difficult to imagine from a clinical point
of view. It could be argued that the arachnoid mater
could be torn, thereby allowing the local anaesthetic
to access the subarachnoid space. But again, the
pressure from 3 mL of solution is highly unlikely to
have been sufficient to have caused the tear allowing
the local anaesthetic to enter subarachnoid space.

As to the seepage of local anaesthetic into the
subarachnoid space, if the dural punctures made
during the spinal attempts are close to the epidural
catheter holes, then it is possible for the local
anaesthetic injected via the catheter to seep into the
subarachnoid space. But it is not clear from the case
report whether the spinal attempts were made above
or below the level of epidural insertion.

Radiological confirmation by injecting water-solu-
ble contrast media has been suggested to confirm the
correct position of epidural catheters by Collier [2].
Furthermore, aspiration of epidural catheter before
removal may have provided some further clarifica-
tions. However, this information is not provided.

It may be that the dura was unintentionally
punctured at epidural attempts, which allowed the
CSF to leak out of the subarachnoid space into the
epidural space. This may also have been facilitated
by dural holes made at subsequent multiple
attempts at spinal. This would then lead to a rela-
tively low volume of CSF into which the local
anaesthetic test dose could have been injected. The
cephalad spread of the local anaesthetic is further
facilitated by the mechanical compression of the
dura by the CSF in the epidural space.

I would disagree with the authors that ‘the clinical
presentation suggests that the local anaesthetic was
probably injected subdurally rather than epidurally’. It
would be interesting to know what other readers think.

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References
1. Batra YK, Sharma A, Rajeev S. Total spinal anaesthesia
following epidural test dose in an ankylosing spondylitic
patient with anticipated difficult airway undergoing total
2. Collier C. A high spinal or a subdural block? Int J Obstet